

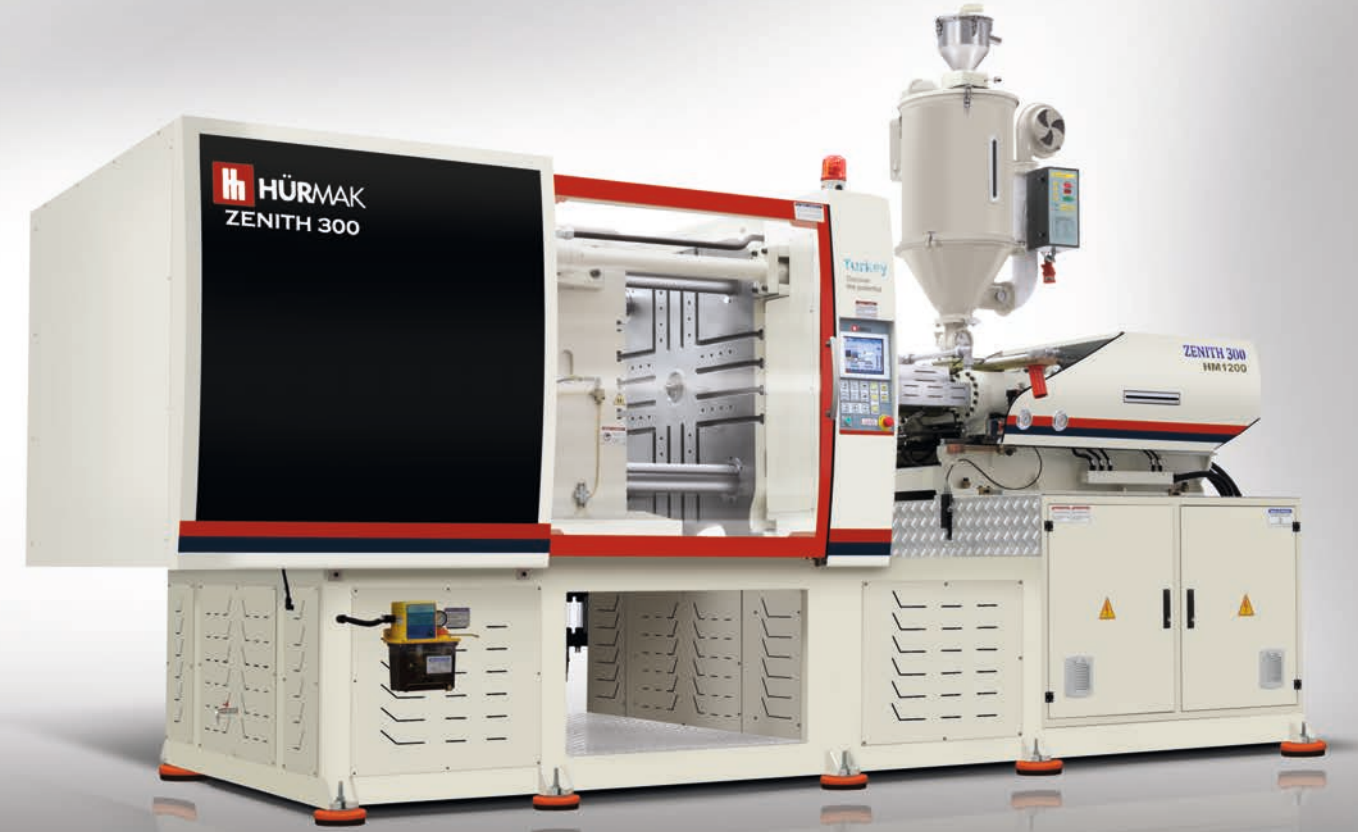


HÜRMAK®
plastik otomotiv makina imalat san. ve tic. a.ş.



Quality. Reliability. Efficiency.

www.hur-mak.com.tr



Half a century of experience

HÜRMAK Plastics Machinery has been one of the leading figures of the Turkish plastics industry since the day it was established in 1969.

Injection molding machines manufactured by Hürmak have proven themselves many times through these years and achieved a solid position as a reliable and long lasting option. With our "Quality rather than quantity." motto, Hürmak strives to produce the best price / performance balanced machines in the market. Our target is being the solid supplier that sits between Western Europe and Asia just as we are geographically located. With our market leading suppliers, we strive to equip our machines with the top level components while we present reasonable investment budgets to our end users. With our world in mind, we strive to produce our machines to work in the most efficient way possible, sometimes consuming even less than a water boiler or a dishwasher. With that purpose, our machines are designed from start till the end to achieve the best energy efficiency with no compromise of performance. Having more than 50 years of experience, we add value to our end users.

ZENITH SERIES

Two-platen ZENITH Series between 200-1000 tons clamping force

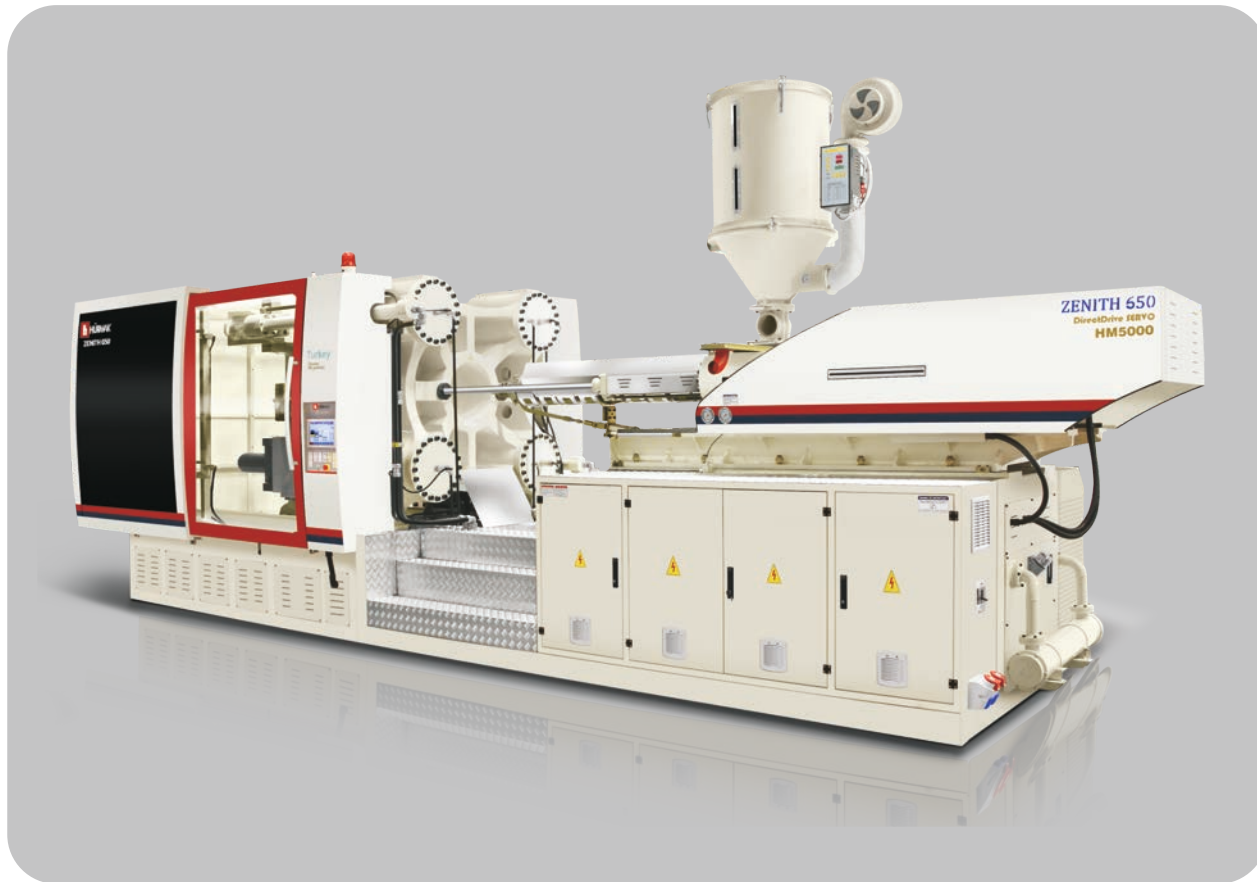
Zenith series is our innovative machine line up with two-platen clamping system. Having developed the first model in 2012, we are one of the most experienced companies in the market for the two-platen technology. Starting from 110 tons of clamping force, we have the smallest systems running in the market that adopts this form of two platen technology. Up to 800 tons of clamping force, Zenith series are manufactured in a standard manner with fixed technical specs. For machines that require greater force, we can completely customize the design for our customers needs tailoring the machine to fit perfectly for the production process.

Providing a rigid and equally balanced clamping power, Zenith series can accomplish way greater tasks when compared to its relatively small foot-print.

With the direct control of the clamping cylinders, users can monitor the actual clamping force and set it to the required level. When compared to similar toggle machines, Zenith series provides 30% smaller foot-print, hence requires much smaller work space.

Flexibility is another advantage of our two-platen Zenith series. Opening stroke, min-max mould height, ejector stroke and mould opening forces can be adjusted completely based on the end user's needs.

To further enhance this flexibility, Zenith series can be ordered with standard equipment or additional equipment can be chosen from a wide variety of options such as direct-driven servo plasticizing, accumulator assisted high-speed injection unit, multi-component solutions and so on.





On board energy meter for consumption monitoring on self screen and on the machine HMI.



Thermal insulation system to minimize the loss of energy on barrel heating.



Extensive filtering of the hydraulic system to ensure longer life-time

- 60 Microns
- 25 Microns
- 10 Microns
- Air-filter



Latest state-of-art helical gear pumps that minimizes the loss in the system to achieve the best performance and efficiency.



Water cooled, permanent magnet servo system that runs at 3000 rpm and sharpest precision.

BAUMÜLLER



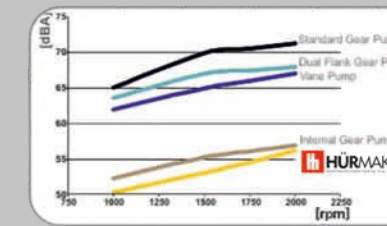
Electromagnetic noise filters to prevent incoming and outgoing noise.



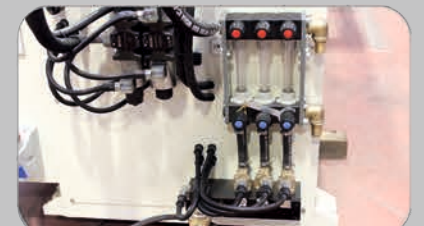
Dedicated safety relay system by Pilz for top level work-safety



Linear guiding system for the maximum precision and minimum resistance. Heavy-duty roller types are used for the clamping systems.



Ultra-silent hydraulic pump system for a better work environment.



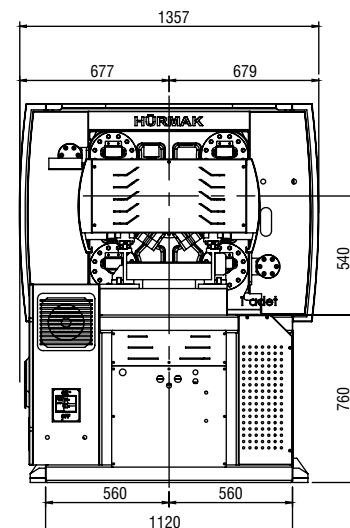
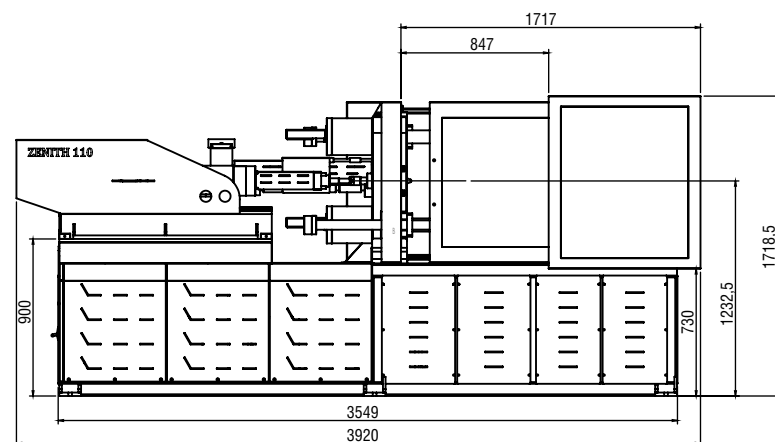
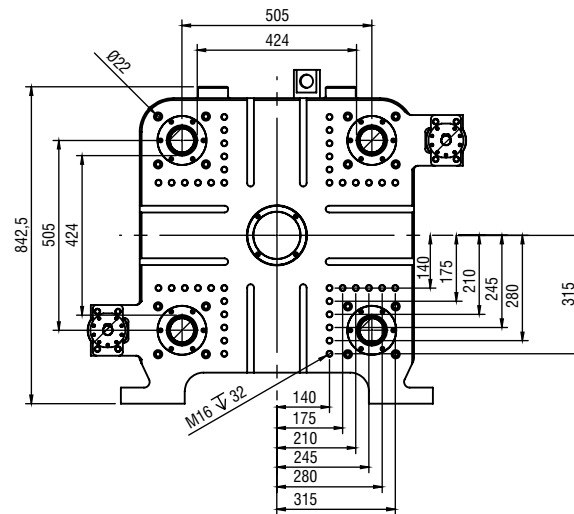
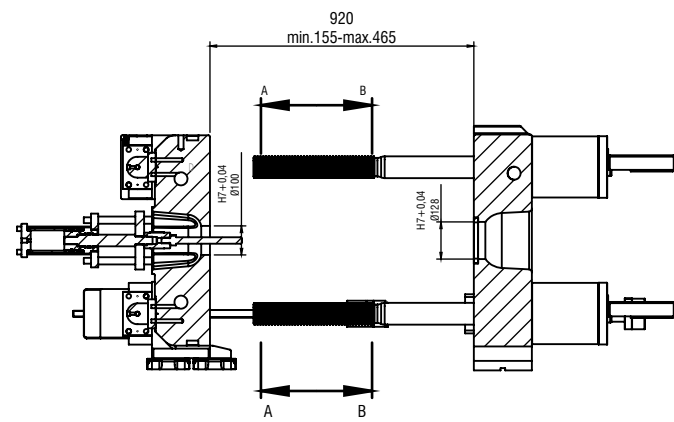
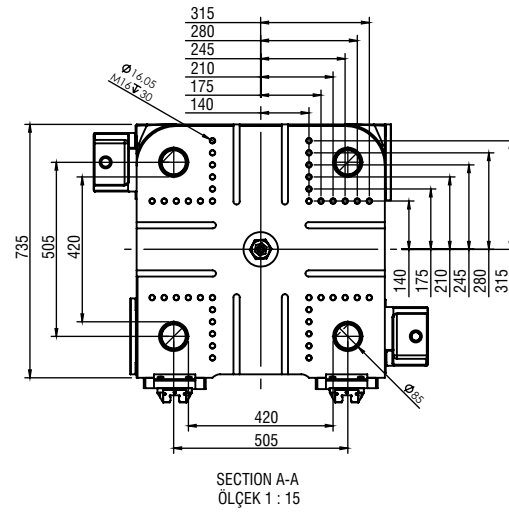
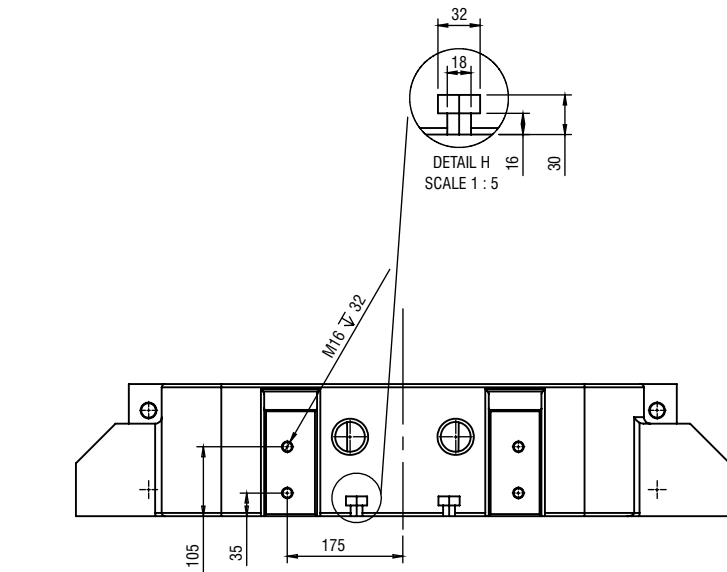
Precise temperature control for precise manufacturing.

- Oil cooling
- Servo motor cooling.
- Servo drive cooling.
- Material feed throat cooling.

All electro-valve controlled.



ZENITH 110



ZENITH 110

CLAMPING UNIT

Locking force	Kn	1100
Closing force	Kn	24
Opening force	Kn	40
Tie-bar distance	mm	430 x 430
Fixed platen size	mm	730 x 730
Mould platen size	mm	725 x 725
Daylight	mm	920
Mould opening stroke	mm	765
Ejector forward force	Kn	121
Ejector backward force	Kn	81
Ejector stroke	mm	115
Number of ejector pins	ad	1
Mold thickness range	min-max	155 - 465

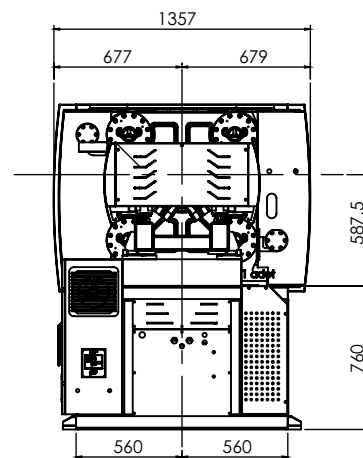
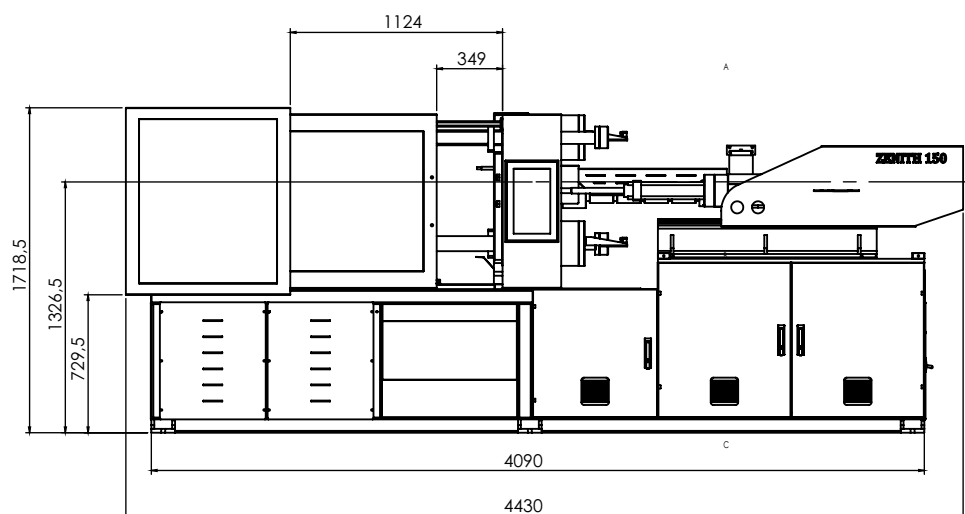
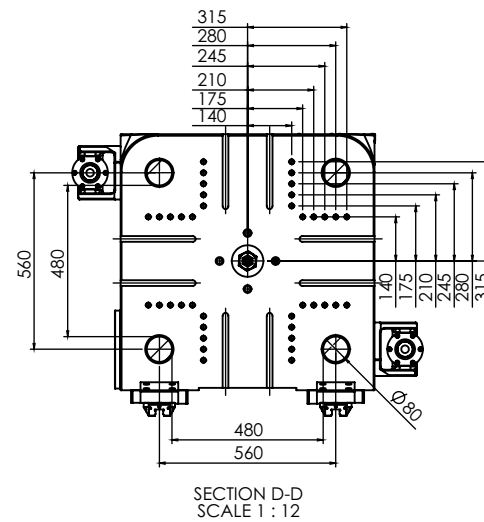
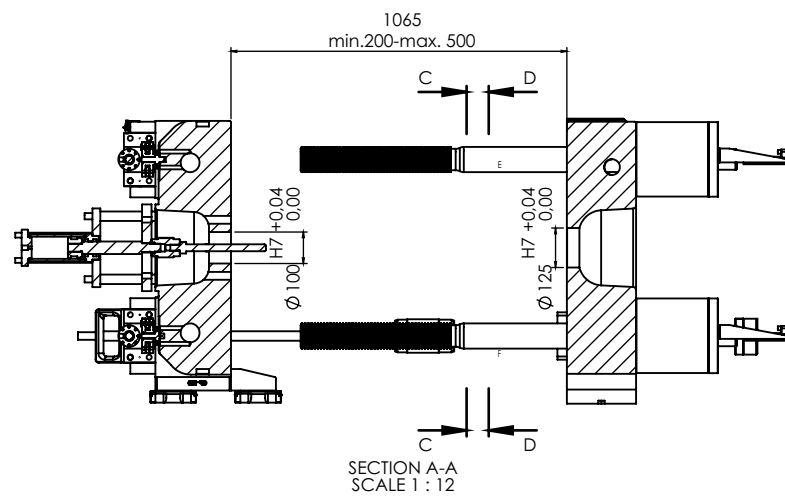
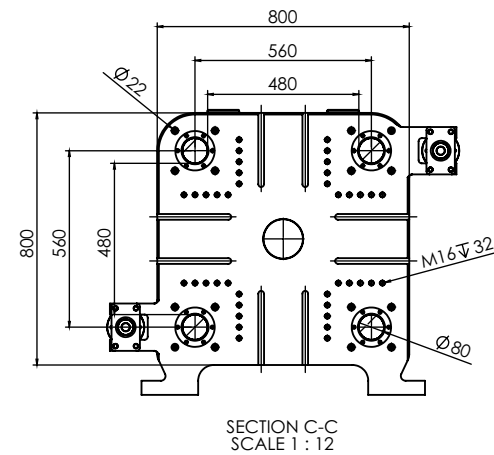
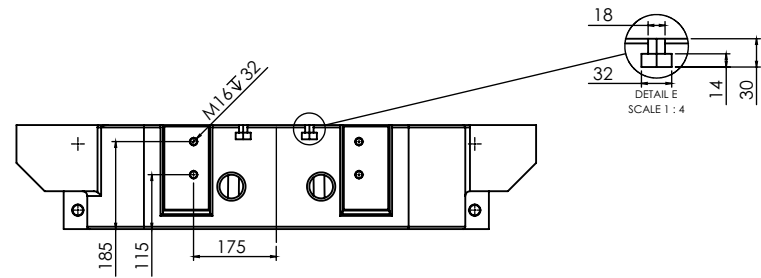
INJECTION UNIT

		Hm750 (op.) / Hm350 (st.)	Hm740 (op.) / Hm470 (st.)	Hm1250 (op.) / Hm700 (st.)
Screw diameter	mm	35 / 40 / 45	40 / 45 / 50	45 / 50 / 55
L/D ratio	L/D	22 / 20 / 18	22 / 20 / 18	22 / 20 / 18
Injection stroke	mm	210	220	240
Standard injection pressure	bar	3704 / 2835 / 2240	2656 / 2100 / 1700	3283 / 2660 / 2198
Increased injection pressure	bar	1714 / 1312 / 1037	1695 / 1335 / 1085	1833 / 1485 / 1227
Shot weight	ps-gr	135 / 184 / 240	251 / 319 / 393	348 / 429 / 519
Shot volume	cm ³	202 / 265 / 333	264 / 350 / 432	381 / 471 / 570
Screw speed	rpm	333	350	280
Plasticizing rate	g/s	16,2 / 21,8 / 29,5	15 / 20,25 / 27,3	23,9 / 32,7 / 44,7
Max screw torque	nm	736	992	1248
Carriage stroke	mm	260	285	355
Nozzle contact force	kN	84	84	84
Injection capacity standard	cm ³ /s	123 / 161 / 203	231 / 306 / 377	196 / 241 / 291
Injection capacity increased	cm ³ /s	577 / 753 / 955	361 / 480 / 592	627 / 773 / 936

GENERAL VALUES

Main motor power	kw	14
Total power	kw	22
Heating zones + nozzle	pcs	3 + 1
Total heating power	kw	8
Oil tank capacity	lt	180
Weight	ton	3,5
Length - width - height	m	4500 x 1400 x 1800

ZENITH 150



ZENITH 150

CLAMPING UNIT

Locking force	Kn	1500
Closing force	Kn	40
Opening force	Kn	62
Tie-bar distance	mm	480 x 480
Fixed platen size	mm	800 x 800
Mould platen size	mm	805 x 805
Daylight	mm	1065
Mould opening stroke	mm	865
Ejector forward force	Kn	121
Ejector backward force	Kn	81
Ejector stroke	mm	115
Number of ejector pins	ad	5
Mold thickness range	min-max	200 - 500

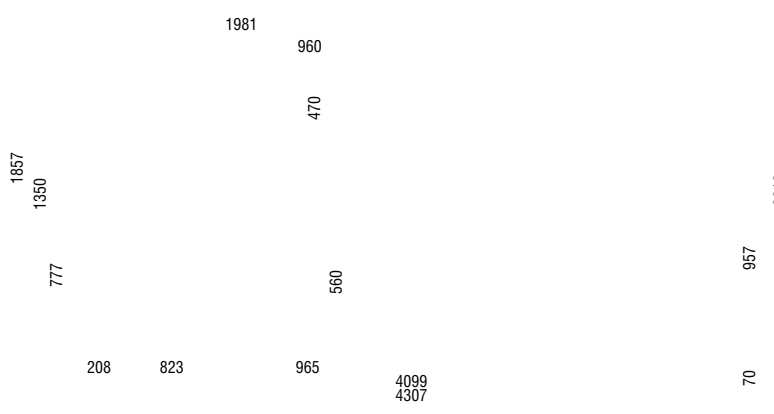
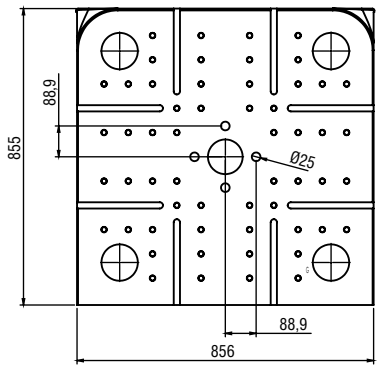
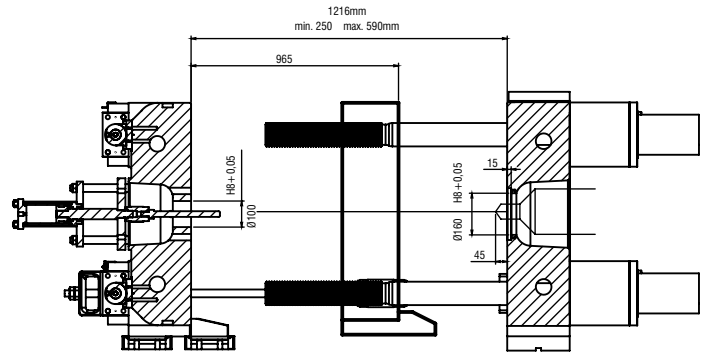
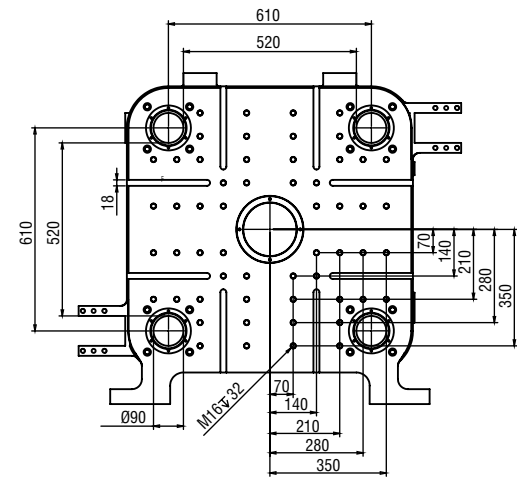
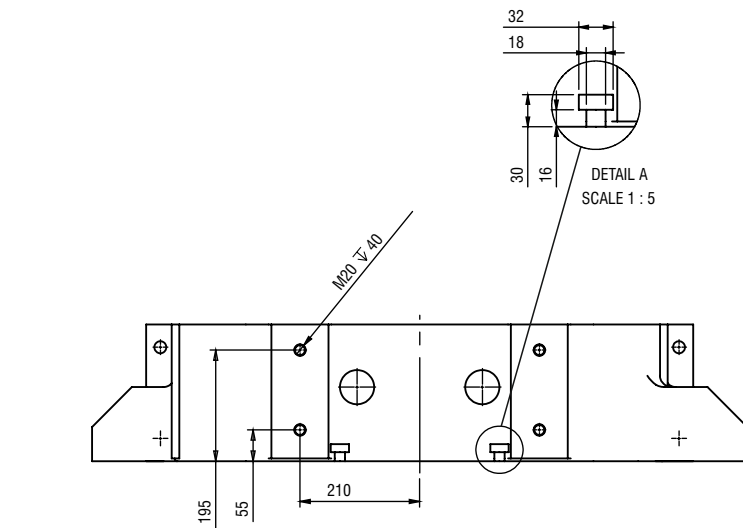
INJECTION UNIT

		Hm750 (op.) / Hm350 (st.)	Hm740 (op.) / Hm470 (st.)	Hm1250 (op.) / Hm700 (st.)
Screw diameter	mm	35 / 40 / 45	40 / 45 / 50	45 / 50 / 55
L/D ratio	L/D	22 / 20 / 18	22 / 20 / 18	22 / 20 / 18
Injection stroke	mm	210	220	240
Standard injection pressure	bar	3704 / 2835 / 2240	2656 / 2100 / 1700	3283 / 2660 / 2198
Increased injection pressure	bar	1714 / 1312 / 1037	1695 / 1335 / 1085	1833 / 1485 / 1227
Shot weight	ps-gr	135 / 184 / 240	251 / 319 / 393	348 / 429 / 519
Shot volume	cm ³	202 / 265 / 333	264 / 350 / 432	381 / 471 / 570
Screw speed	rpm	333	350	280
Plasticizing rate	g/s	16,2 / 21,8 / 29,5	15 / 20,25 / 27,3	23,9 / 32,7 / 44,7
Max screw torque	nm	736	992	1248
Carriage stroke	mm	260	285	355
Nozzle contact force	kN	84	84	84
Injection capacity standard	cm ³ /s	123 / 161 / 203	231 / 306 / 377	196 / 241 / 291
Injection capacity increased	cm ³ /s	577 / 753 / 955	361 / 480 / 592	627 / 773 / 936

GENERAL VALUES

Main motor power	kw	14
Total power	kw	22
Heating zones + nozzle	pcs	3 + 1
Total heating power	kw	8
Oil tank capacity	lt	180
Weight	ton	4
Length - width - height	m	4500 x 1700 x 1900

ZENITH 200



ZENITH200

CLAMPING UNIT / UNITE DE SERRAGE

Locking force	Kn	2000
Closing force	Kn	40
Opening force	Kn	62
Tie-bar distance	mm	520 x 520
Fixed platen size	mm	860 x 860
Mould platen size	mm	855 x 855
Daylight	mm	1215
Mould opening stroke	mm	965
Ejector forward force	Kn	61
Ejector backward force	Kn	41
Ejector stroke	mm	120
Number of ejector pins	ad	4 + 1
Mold thickness range	min-max	250 - 590

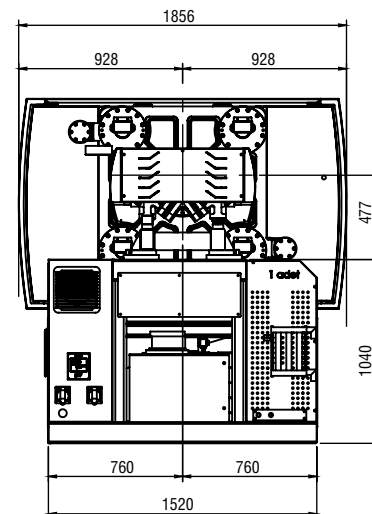
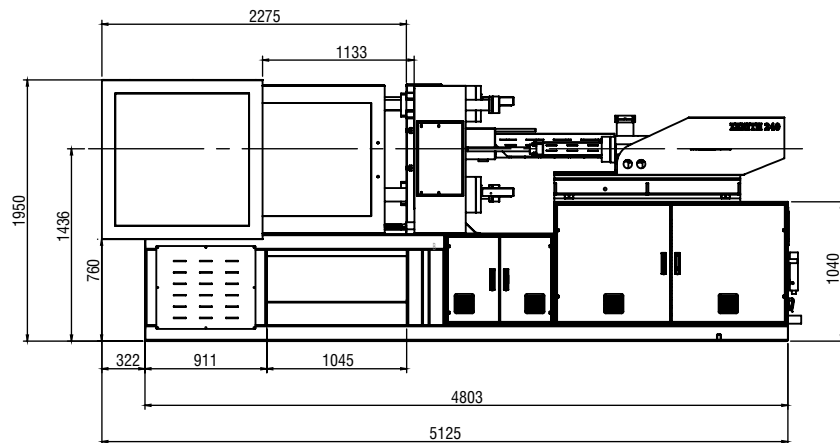
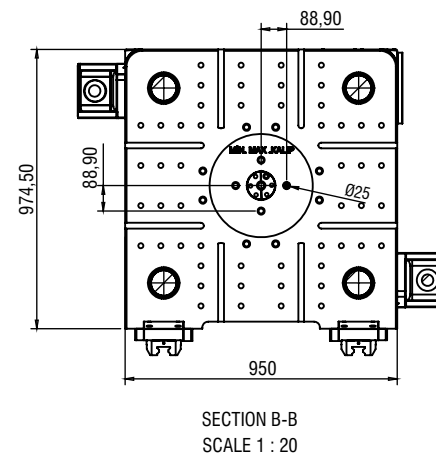
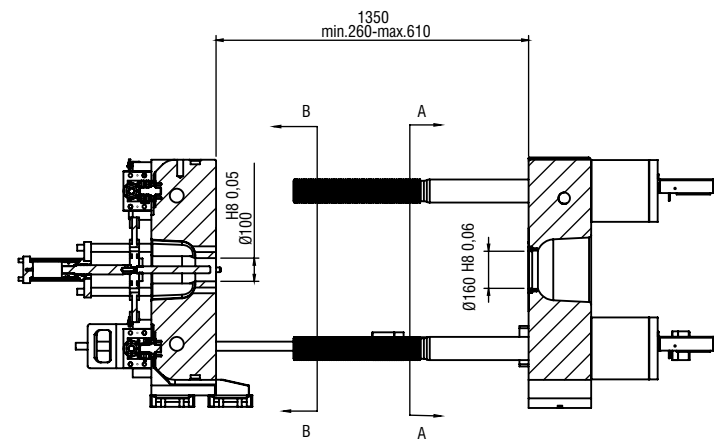
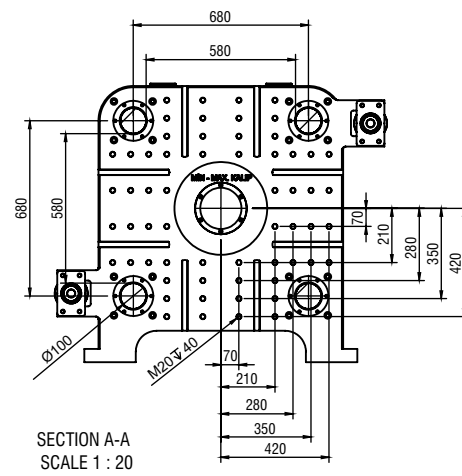
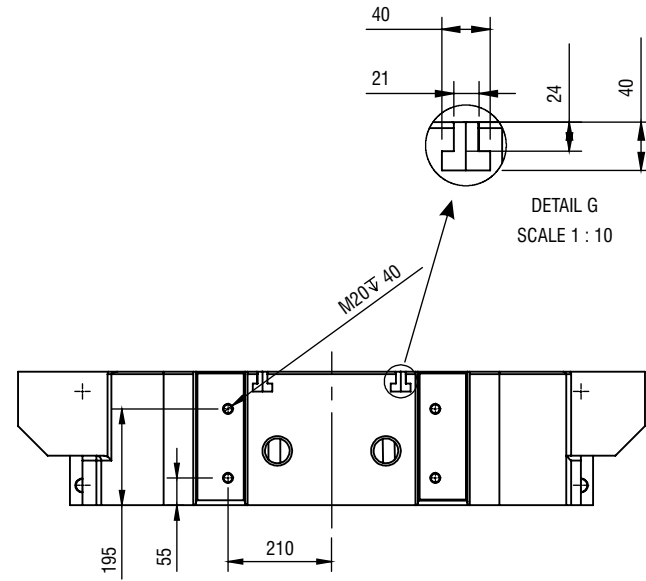
INJECTION UNIT

		Hm740 (op.) / Hm350 (st.)	Hm1250 (op.) / Hm700 (st.)	Hm1560 (op.) / Hm1000 (st.)
Screw diameter	mm	40 / 45 / 50	45 / 50 / 55	50 / 55 / 60
L/D ratio	L/D	22 / 20 / 18	22 / 20 / 18	22 / 20 / 18
Injection stroke	mm	210	240	270
Standard injection pressure	bar	3704 / 2835 / 2240	3283 / 2660 / 2198	2940 / 2430 / 2041
Increased injection pressure	bar	1714 / 1312 / 1037	1833 / 1485 / 1227	1900 / 1566 / 1319
Shot weight	ps-gr	135 / 184 / 240	348 / 429 / 519	482 / 583 / 694
Shot volume	cm ³	202 / 265 / 333	381 / 471 / 570	530 / 641 / 763
Screw speed	rpm	333	280	266
Plasticizing rate	g/s	16,2 / 21,8 / 29,5	23,9 / 32,7 / 44,7	33,7 / 41,4 / 50,9
Max screw torque	nm	736	1248	1504
Carriage stroke	mm	260	355	355
Nozzle contact force	kN	84	84	125
Injection capacity standard	cm ³ /s	123 / 161 / 203	196 / 241 / 291	280 / 339 / 403
Injection capacity increased	cm ³ /s	577 / 753 / 955	627 / 773 / 936	433 / 526 / 626

GENERAL VALUES

Main motor power	kw	14
Total power	kw	25
Heating zones + nozzle	pcs	3 + 1
Total heating power	kw	11
Oil tank capacity	lt	220
Weight	ton	5,2
Length - width - height	m	4800x1700x2500

ZENITH 240



ZENITH240

CLAMPING UNIT / UNITE DE SERRAGE

Locking force	Kn	2400
Closing force	Kn	50
Opening force	Kn	90
Tie-bar distance	mm	580 x 580
Fixed platen size	mm	950 x 950
Mould platen size	mm	950 x 950
Daylight	mm	1350
Mould opening stroke	mm	1090
Ejector forward force	Kn	121
Ejector backward force	Kn	81
Ejector stroke	mm	125
Number of ejector pins	ad	5
Mold thickness range	min-max	260 - 610

INJECTION UNIT

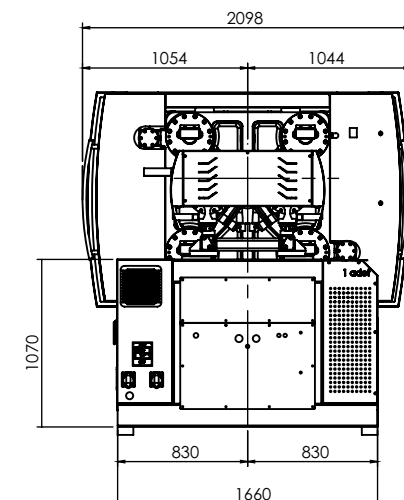
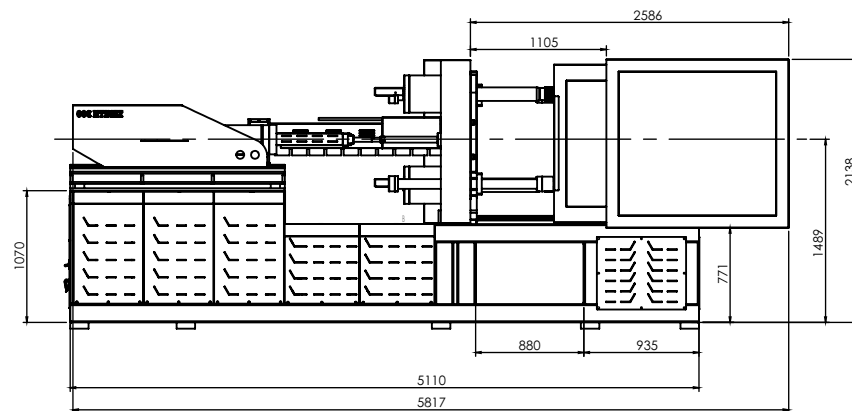
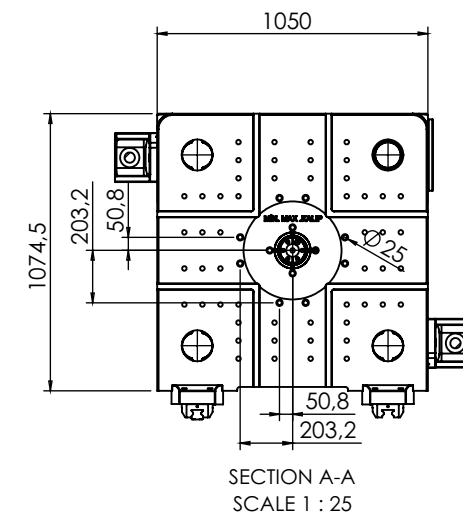
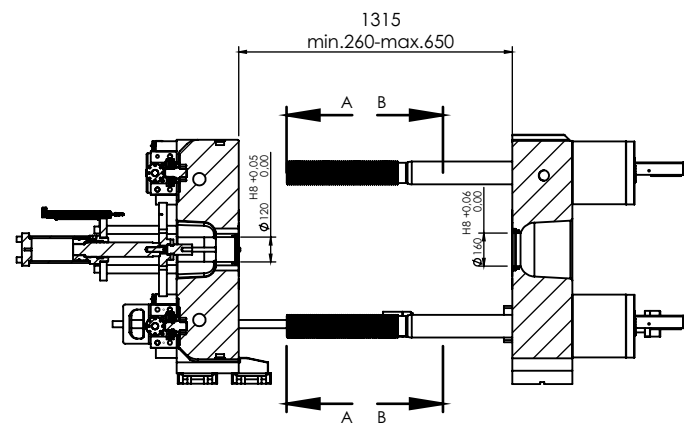
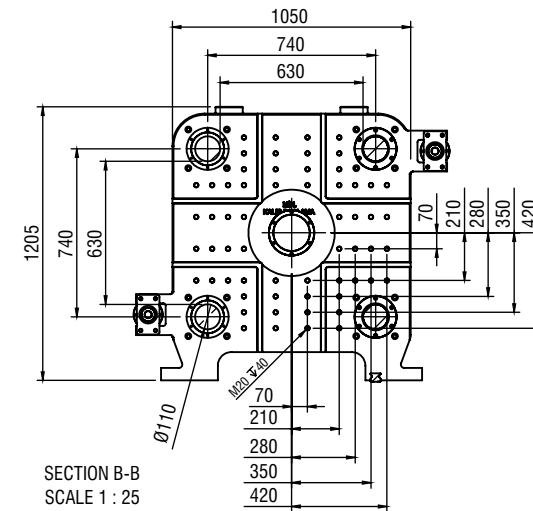
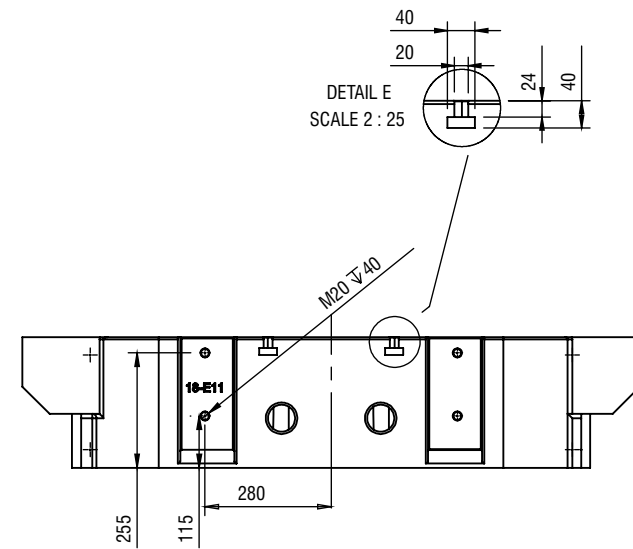
		Hm1250 (op.) / Hm700 (st.)	Hm1560 (op.) / Hm1000 (st.)	Hm1840 (op.) / Hm 910 (st.)
Screw diameter	mm	45 / 50 / 55	50 / 55 / 60	55 / 60 / 65
L/D ratio	L/D	22 / 20 / 18	22 / 20 / 18	21 / 20 / 18
Injection stroke	mm	240	270	290
Standard injection pressure	bar	3283 / 2660 / 2198	2940 / 2430 / 2041	2661 / 2236 / 1905
Increased injection pressure	bar	1833 / 1485 / 1227	1900 / 1566 / 1319	1322 / 1111 / 946
Shot weight	ps-gr	348 / 429 / 519	482 / 583 / 694	627 / 746 / 876
Shot volume	cm ³	381 / 471 / 570	530 / 641 / 763	689 / 820 / 962
Screw speed	rpm	280	266	333
Plasticizing rate	g/s	23,9 / 32,7 / 44,7	33,7 / 41,4 / 50,9	41,4 / 50,9 / 67,8
Max screw torque	nm	1248	1504	1504
Carriage stroke	mm	355	355	455
Nozzle contact force	kN	84	125	76
Injection capacity standard	cm ³ /s	196 / 241 / 291	280 / 339 / 403	344 / 409 / 481
Injection capacity increased	cm ³ /s	627 / 773 / 936	433 / 526 / 626	1395 / 1660 / 1948

GENERAL VALUES

Main motor power	kw	19
Total power	kw	30,5
Heating zones + nozzle	pcs	5 + 1
Total heating power	kw	11,5
Oil tank capacity	lt	260
Weight	ton	6,4
Length - width - height	m	5300x1900x2000

ZENITH 300

ZENITH300



CLAMPING UNIT / UNITE DE SERRAGE

Locking force	Kn	3000
Closing force	Kn	50
Opening force	Kn	90
Tie-bar distance	mm	630x630
Fixed platen size	mm	1050x1050
Mould platen size	mm	1060x1050
Daylight	mm	1315
Mould opening stroke	mm	121
Ejector forward force	Kn	81
Ejector backward force	Kn	125
Ejector stroke	mm	5
Number of ejector pins	ad	260-260
Mold thickness range	min-max	

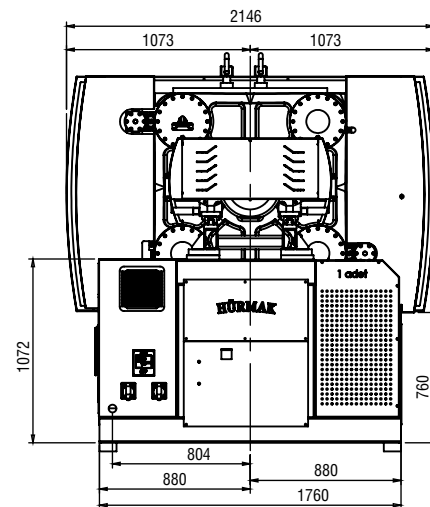
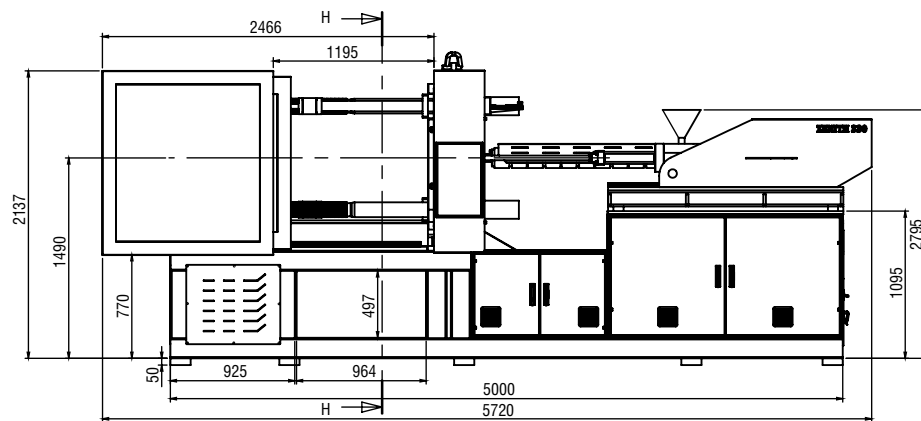
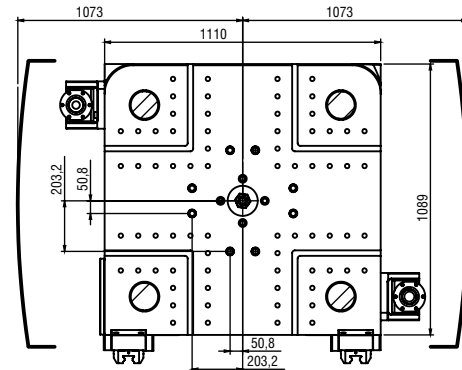
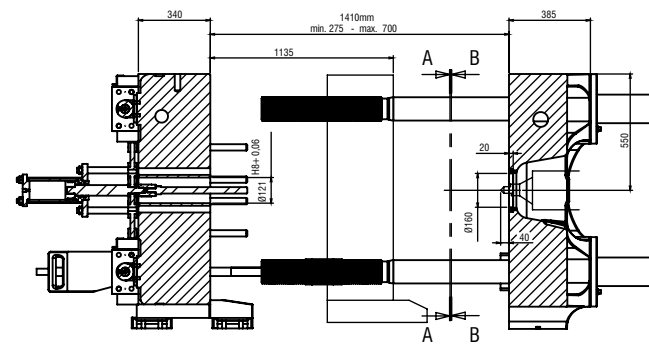
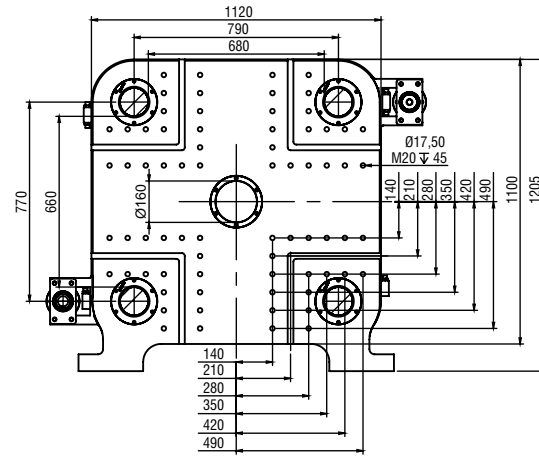
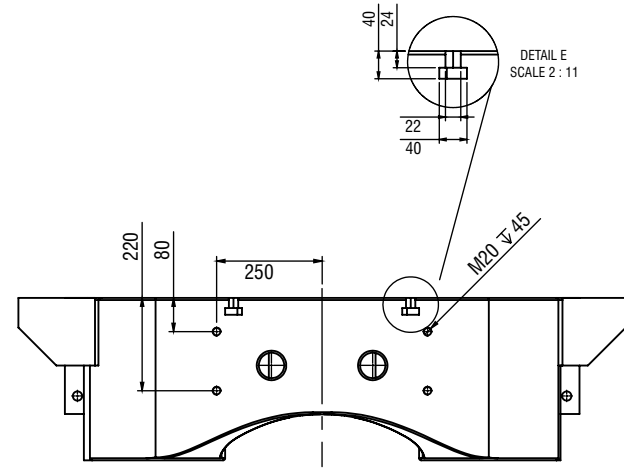
INJECTION UNIT

		Hm1560 (op.) / Hm1000 (st.)	Hm1840 (op.) / Hm910 (st.)	Hm3150 (op.) / Hm 1870 (st.)
Screw diameter	mm	50 / 55 / 60	55 / 60 / 65	70 / 75 / 80
L/D ratio	L/D	22 / 20 / 18	21 / 20 / 18	20 / 19 / 18
Injection stroke	mm	270	290	330
Standard injection pressure	bar	2940 / 2430 / 2041	2661 / 2236 / 1905	2479 / 2160 / 1898
Increased injection pressure	bar	1900 / 1566 / 1319	1322 / 1111 / 946	1469 / 1280 / 1125
Shot weight	ps-gr	482 / 583 / 694	627 / 746 / 876	1156 / 1327 / 1510
Shot volume	cm ³	530 / 641 / 763	689 / 820 / 962	1269 / 1457 / 1658
Screw speed	rpm	266	333	254
Plasticizing rate	g/s	33,7 / 41,4 / 50,9	41,4 / 50,9 / 67,8	50,6 / 76,9 / 108,6
Max screw torque	nm	1504	1504	1504
Carriage stroke	mm	355	455	455
Nozzle contact force	kN	125	76	76
Injection capacity standard	cm ³ /s	280 / 339 / 403	344 / 409 / 481	517 / 594 / 675
Injection capacity increased	cm ³ /s	433 / 526 / 626	1395 / 1660 / 1948	1473 / 1692 / 1925

GENERAL VALUES

Main motor power	kw	31
Total power	kw	55,5
Heating zones + nozzle	pcs	5+1
Total heating power	kw	24,5
Oil tank capacity	lt	350
Weight	ton	10
Length - width - height	m	5800x2100x2150

ZENITH 330



ZENITH330

CLAMPING UNIT / UNITE DE SERRAGE

Locking force	Kn	3300
Closing force	Kn	50
Opening force	Kn	90
Tie-bar distance	mm	680x660
Fixed platen size	mm	1120x1100
Mould platen size	mm	1110x1100
Daylight	mm	1410
Mould opening stroke	mm	1135
Ejector forward force	Kn	101
Ejector backward force	Kn	70
Ejector stroke	mm	140
Number of ejector pins	ad	4+1
Mold thickness range	min-max	275-700

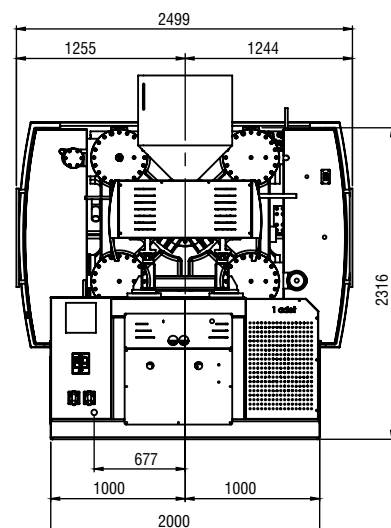
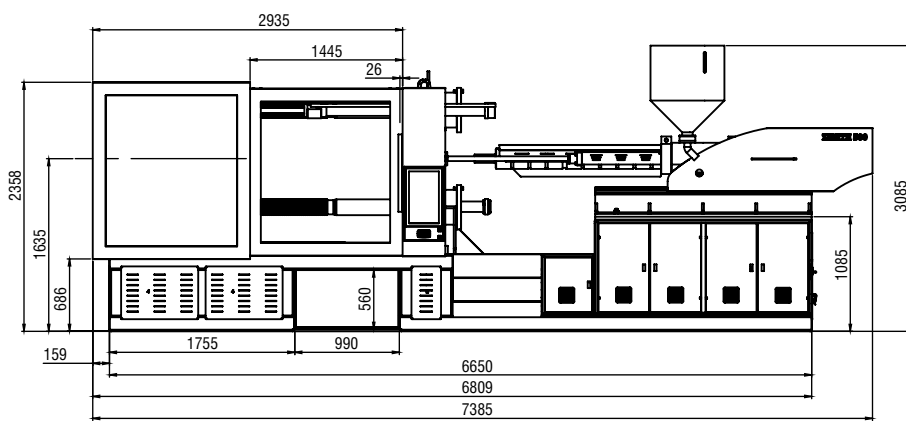
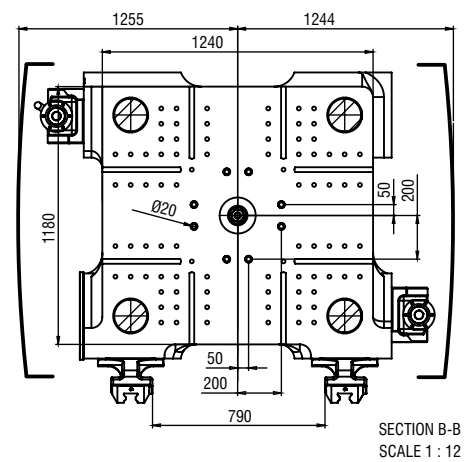
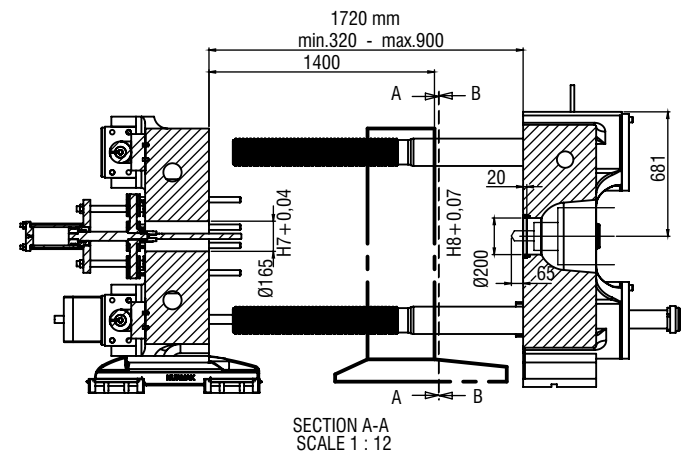
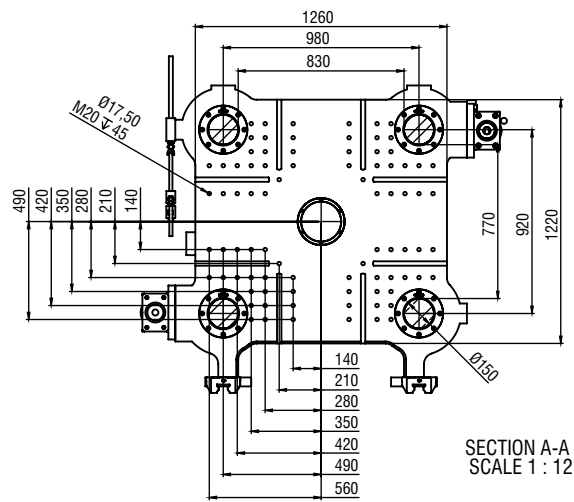
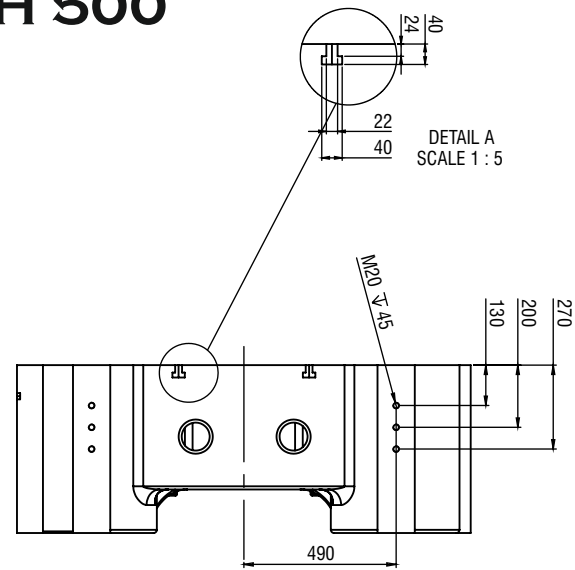
INJECTION UNIT

		Hm1560 (op.) / Hm1000 (st.)	Hm1840 (op.) / Hm910 (st.)	Hm3150 (op.) / Hm 1870 (st.)
Screw diameter	mm	50 / 55 / 60	55 / 60 / 65	70 / 75 / 80
L/D ratio	L/D	22 / 20 / 18	21 / 20 / 18	20 / 19 / 18
Injection stroke	mm	270	290	330
Standard injection pressure	bar	2940 / 2430 / 2041	2661 / 2236 / 1905	2479 / 2160 / 1898
Increased injection pressure	bar	1900 / 1566 / 1319	1322 / 1111 / 946	1469 / 1280 / 1125
Shot weight	ps-gr	482 / 583 / 694	627 / 746 / 876	1156 / 1327 / 1510
Shot volume	cm ³	530 / 641 / 763	689 / 820 / 962	1269 / 1457 / 1658
Screw speed	rpm	266	333	254
Plasticizing rate	g/s	33,7 / 41,4 / 50,9	41,4 / 50,9 / 67,8	50,6 / 76,9 / 108,6
Max screw torque	nm	1504	1504	1504
Carriage stroke	mm	355	455	455
Nozzle contact force	kN	125	76	76
Injection capacity standard	cm ³ /s	280 / 339 / 403	344 / 409 / 481	517 / 594 / 675
Injection capacity increased	cm ³ /s	433 / 526 / 626	1395 / 1660 / 1948	1473 / 1692 / 1925

GENERAL VALUES

Main motor power	kw	42
Total power	kw	66,5
Heating zones + nozzle	pcs	5+1
Total heating power	kw	24,5
Oil tank capacity	lt	370
Weight	ton	11,5
Length - width - height	m	5750x2150x2150

ZENITH 500



ZENITH500

CLAMPING UNIT / UNITE DE SERRAGE

Locking force	Kn	5000
Closing force	Kn	98
Opening force	Kn	161
Tie-bar distance	mm	830 x 770
Fixed platen size	mm	1220 x 1260
Mould platen size	mm	1180 x 1240
Daylight	mm	1790
Mould opening stroke	mm	1390
Ejector forward force	Kn	101
Ejector backward force	Kn	70
Ejector stroke	mm	180
Number of ejector pins	ad	8 + 1
Mold thickness range	min-max	400 - 970

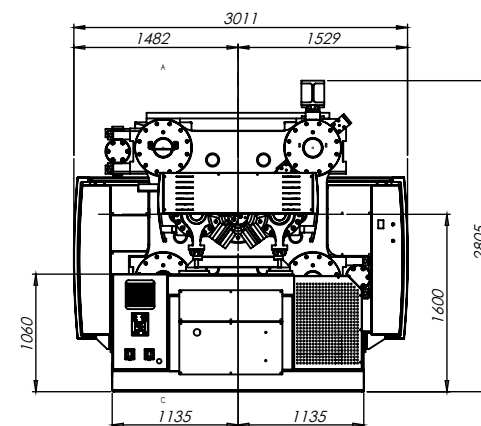
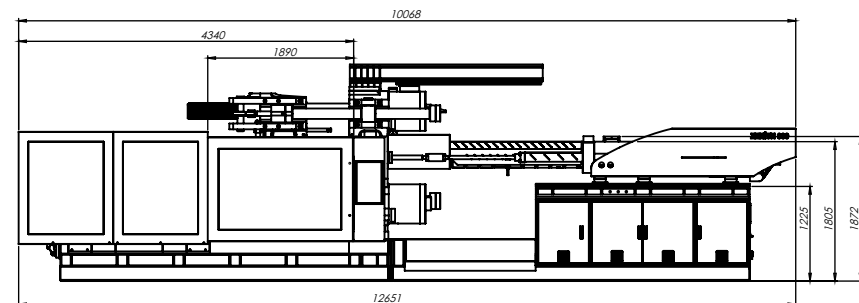
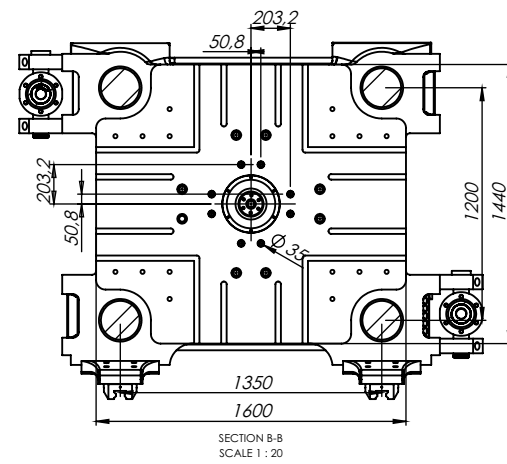
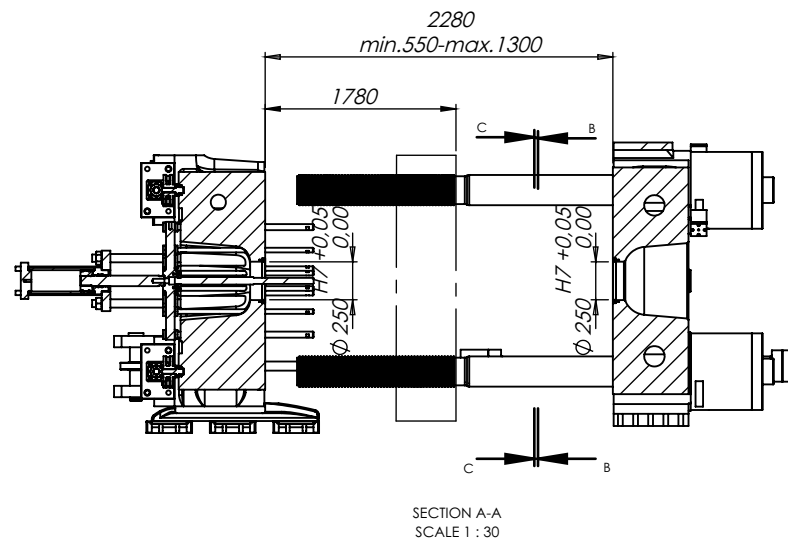
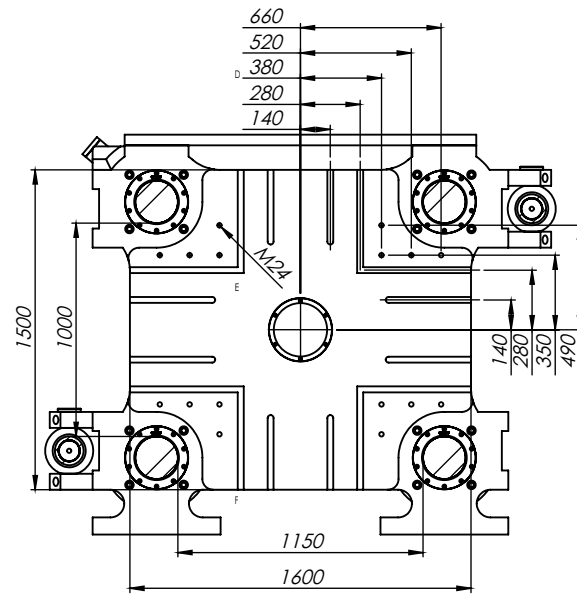
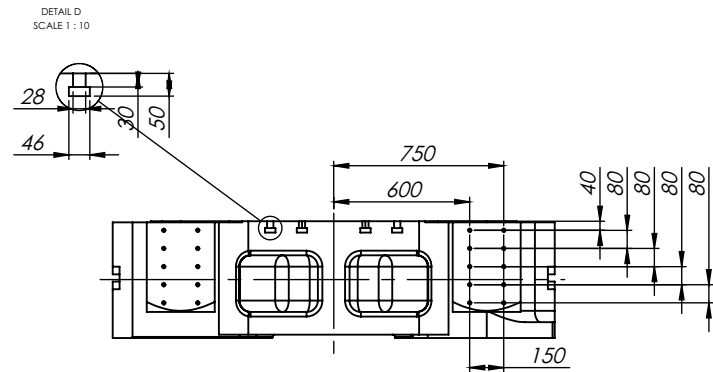
INJECTION UNIT

		Hm3150 (op.) / Hm 1870 (st.)	Hm5070(op.) / Hm 3310 (st.)	Hm5650(op.) / Hm 3670 (st.)
Screw diameter	mm	70 / 75 / 80	80 / 85 / 90	85 / 90 / 95
L/D ratio	L/D	20 / 19 / 18	19 / 18 / 17	23 / 21 / 20
Injection stroke	mm	330	400	450
Standard injection pressure	bar	2479 / 2160 / 1898	2492 / 2207 / 1969	2207 / 1969 / 1767
Increased injection pressure	bar	1469 / 1280 / 1125	1625 / 1439 / 1283	1439 / 1283 / 1152
Shot weight	ps-gr	1156 / 1327 / 1510	1830 / 2063 / 2316	2324 / 2605 / 2903
Shot volume	cm ³	1269 / 1457 / 1658	2034 / 2297 / 2575	2552 / 2861 / 3188
Screw speed	rpm	254	187	20
Plasticizing rate	g/s	50,6 / 76,9 / 108,6	78,2 / 108,9 / 127,3	108,9 / 127,3 / 145,1
Max screw torque	nm	1504	4192	5168
Carriage stroke	mm	455	655	655
Nozzle contact force	kN	76	131	131
Injection capacity standard	cm ³ /s	517 / 594 / 675	551 / 623 / 697	735 / 825 / 918
Injection capacity increased	cm ³ /s	1473 / 1692 / 1925	1297 / 1464 / 1642	2203 / 2471 / 2753

GENERAL VALUES

Main motor power	kw	42 + 31
Total power	kw	102
Heating zones + nozzle	pcs	5 + 1
Total heating power	kw	29
Oil tank capacity	lt	450
Weight	ton	18,5
Length - width - height	m	7600x2500x2700

ZENITH 800



ZENITH800

CLAMPING UNIT / UNITE DE SERRAGE

Locking force	Kn	8000
Closing force	Kn	160
Opening force	Kn	251
Tie-bar distance	mm	1150 x 1000
Fixed platen size	mm	1500 x 1600
Mould platen size	mm	1440 x 1600
Daylight	mm	2280
Mould opening stroke	mm	1600
Ejector forward force	Kn	215
Ejector backward force	Kn	161
Ejector stroke	mm	250
Number of ejector pins	ad	16 + 1
Mold thickness range	min-max	550 - 1300

INJECTION UNIT

		Hm5070(op.) / Hm 3310 (st.)	Hm11900(op.) / Hm 5760 (st.)	Hm13700(op.) / Hm 7510 (st.)
Screw diameter	mm	85 / 90 / 95	98 / 105 / 115	105 / 120 / 135
L/D ratio	L/D	22 / 21 / 20	23 / 21 / 19	24 / 21 / 19
Injection stroke	mm	450	540	570
Standard injection pressure	bar	2207 / 1969 / 1767	2100 / 2539 / 2117	2770 / 2121 / 1676
Increased injection pressure	bar	1439 / 1283 / 1152	1506 / 1233 / 1028	1523 / 1166 / 921
Shot weight	ps-gr	2324 / 2605 / 2903	3280 / 4020 / 4750	4500 / 5800 / 7100
Shot volume	cm ³	2552 / 2861 / 3188	3825 / 4673 / 5606	4933 / 6443 / 8154
Screw speed	rpm	20	143	143
Plasticizing rate	g/s	108,9 / 127,3 / 145,1	56,4 / 60,9 / 65,8	55,7 / 57,9 / 63,7
Max screw torque	nm	5168	8704	8704
Carriage stroke	mm	655	660	660
Nozzle contact force	kN	131	110	110
Injection capacity standard	cm ³ /s	735 / 825 / 918	697 / 902 / 1082	826 / 1080 / 1366
Injection capacity increased	cm ³ /s	2203 / 2471 / 2753	3131 / 2825 / 4587	2735 / 3572 / 4520

GENERAL VALUES

Main motor power	kw	42 + 42 + 31
Total power	kw	172
Heating zones + nozzle	pcs	6 + 1
Total heating power	kw	57
Oil tank capacity	lt	880
Weight	ton	41
Length - width - height	m	9500 x 3000 x 2700